

S/N 09/390,228

PATENTRemarks

Favorable review is requested in view of the above amendments and following remarks. Claims 1, 31, and 76 have been amended to remove Si as an element to be included in the barrier layer. Claims 27, 54, and 75 have been cancelled without prejudice. No new matter has been added. Claims 1 - 7, 9, 11 - 27, 29, 31, 50 - 54, 56 - 64, and 74 - 77 are pending in the application.

Interview

A phone interview was conducted between Examiner Angebrannt, Doug Mueller, and Charles Jacobson on November 18, 2003. The interview focused on the patentability of the present claims in regard to the Office Action dated September 3, 2003. Examiner Angebrannt continues to maintain that phase change recording media and magneto-optical recording media are interchangeable. Applicants do not concede the correctness of this belief.

Claim Objections

Claims 9, 11, 27, 54, and 75 were objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form. Applicants respectfully traverse this objection, and respectfully request reconsideration in view of the following comments.

Claims 27, 54, and 75 have been cancelled. Claim 9 refers to a first and a second barrier material. The first and second barrier material are included in the first and second protective layer, not the barrier layer of claim 1. Thus, claim 9 is not broader than claim 1. Claim 11 depends from claim 9 and also further limits the first and second protective layer, not the barrier layer of claim 1. Withdrawal of the objections is requested.

Rejection under 35 U.S.C. § 103

Claims 1 - 7, 9, 11 - 27, 29, 31, 50 - 54, 56 - 64, and 74 - 77 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yoshioka et al. (U.S. Patent No. 5,194,363) in view of Yoshioka et al. (JP 04 - 052188) and Shino et al. (JP 05 - 274726). Applicants respectfully traverse this rejection, and respectfully request reconsideration in view of the following comments.

BEST AVAILABLE COPY

S/N 09/390,228

PATENT

Claims 1, 31, and 76 have been amended to remove Si from the group of elements included in the barrier layer. In addition, claim 50 does not recite Si as an element to be included in the Ge-containing layer. The Group IVa notation in claims 50 and 52 represents the previous IUPAC form. If Group IVa was the CAS version, there would be no need to call out the specific reference to carbon, because the CAS version of Group IVa includes carbon. See page 44, lines 10 -13 of the specification. According to the previous IUPAC notation, Si is a Group IVb element, which is not listed in claim 50. A copy of the Periodic Table from the CRC Handbook of Chemistry and Physics 75th ed. showing the new IUPAC notation, the previous IUPAC notation, and the CAS notation for the periodic groups was previously presented along with the Amendment and Response filed on October 19, 2000. Another copy is enclosed for the ease of the Examiner.

Shino et al. describes a composition range for Si and Ge of a protective film containing Si, Ge, M, and H, which is a typical range for a Si-containing protective layer. However, the present claimed invention does not include Si in the barrier layer (Ge-containing layer). Therefore, Shino et al., along with the other cited references, do not disclose or suggest the present claimed invention. Withdrawal of the rejection is respectfully requested.

Conclusion

In view of the comments presented herein, favorable reconsideration in the form of a Notice of Allowance is respectfully requested. If any further question should arise, the Examiner is invited to contact Applicants' representative at the number listed below.

Respectfully Submitted,

Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903
(612) 371-5237

Dated: December 1, 2003By: 

Douglas P. Mueller
Reg. No. 30,300
DPM:CAJ

BEST AVAILABLE COPY

BEST AVAILABLE COPY

PERIODIC TABLE OF THE ELEMENTS

1 New notation
 2 Previous IUPAC form
 3 CAS version

KEY TO CHART

Atomic Number →
 Symbol →
 1989 Atomic Weight →
 Oxidation States
 Electron Configuration

1 H 1.00794	2 He 4.002602																	13 Al 26.9815385	14 Si 28.0855	15 P 30.973762	16 S 32.06	17 Cl 35.453	18 Ar 39.948																		
3 Li 6.941	4 Be 9.012182	5 B 10.811	6 C 12.011	7 N 14.00644	8 O 15.9994	9 F 18.9984032	10 Ne 20.1797																	19 K 39.0983	20 Ca 40.078	21 Sc 44.955910	22 Ti 47.867	23 V 50.9415	24 Cr 51.9961	25 Mn 54.938045	26 Fe 55.845	27 Co 58.933195	28 Ni 58.6934	29 Cu 63.546	30 Zn 65.39	31 Ga 69.723	32 Ge 72.61	33 As 74.921595	34 Se 78.96	35 Br 79.904	36 Kr 83.80
37 Rb 85.4678	38 Sr 87.62	39 Y 88.90585	40 Zr 91.224	41 Nb 92.90638	42 Mo 95.94	43 Tc 98.90625	44 Ru 101.07	45 Rh 102.90550	46 Pd 106.42	47 Ag 107.8682	48 Cd 112.411	49 In 114.818	50 Sn 118.710	51 Sb 121.760	52 Te 127.60	53 I 126.90547	54 Xe 131.29																								
55 Cs 132.90545	56 Ba 137.327	57 La 138.905	58 Ce 140.12	59 Pr 140.90768	60 Nd 144.24	61 Pm (145)	62 Sm 150.36	63 Eu 151.965	64 Gd 157.25	65 Tb 158.92534	66 Dy 162.50	67 Ho 164.93032	68 Er 167.26	69 Tm 168.93421	70 Yb 173.04	71 Lu 174.967																									
87 Fr (223)	88 Ra (226)	89 Ac (227)	90 Th (232)	91 Pa (231)	92 U (238)	93 Np (237)	94 Pu (244)	95 Am (243)	96 Cm (247)	97 Bk (247)	98 Cf (251)	99 Es (252)	100 Fm (257)	101 Md (258)	102 No (259)	103 Lr (260)																									

O.P.O.
 N.O.P.

The new IUPAC format numbers the groups from 1 to 18. The previous IUPAC numbering system and the system used by Chemical Abstracts Service (CAS) are also shown. For radioactive elements that do not occur in nature, the mass number of the most stable isotope is given in parentheses.

REFERENCES

1. O. J. Leigh, Editor, *Nomenclature of Inorganic Chemistry*, Blackwell Scientific Publications, Oxford, 1990.
2. *Chemical and Engineering News*, 63(5), 27, 1985.